



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,123	09/10/2003	George R. England	GC774-2	6906

7590 04/01/2005

VICTORIA L. BOYD
GENENCOR INTERNATIONAL, INC.
925 PAGE MILL ROAD
PALO ALTO, CA 94304-1013

EXAMINER

ZEMAN, ROBERT A

ART UNIT	PAPER NUMBER
----------	--------------

1645

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/660,123

Applicant(s)

ENGLAND ET AL.

Examiner

Robert A. Zeman

Art Unit

1645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 1-14 and 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 1645

DETAILED ACTION

Applicant's election with traverse of Group III in the reply filed on 1-14-2005 is acknowledged. The traversal is on the ground(s) that a search and examination of the entire application can be made without serious burden to the Examiner. This is not found persuasive because the searches of the various groups would not be coextensive in scope.

The requirement is still deemed proper and is therefore made FINAL.

It should be noted that claim 33 was inadvertently included in Group III. Since said claim is drawn to the subject matter of Group I, it has been withdrawn from consideration. Consequently, claims 1-33 are pending, claims 1-14 and 33 have been withdrawn from consideration as being drawn to non-elected inventions. Claims 15-32 are currently under examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 15-32 are dependent on multiple claims drawn to non-elected inventions.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 1645

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 15-28 and 31-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Fowler et al. (U.S. Patent 6,407,046).

The instant claims are drawn to methods of producing proteins (endogenous cellulase) utilizing a host cell wherein the said host cell can be a bacteria (*Bacillus*, *Streptomyces*, *Thermomonospora* or *Cellulomonas*) or a filamentous fungus (*Trichoderma reesei*). Said host cell contains a vector wherein said vector can optionally comprise a sophorose or gentiobiose inducible promoter (*cbh 1*).

Fowler et al. disclose methods of recombinantly producing cellulases utilizing host cells comprising expression vectors wherein said host cells can be either bacterial, yeast or fungal. Fowler et al. further disclose that the bacterial host cells can be *Bacillus subtilis* and the fungal host cells can be *Trichoderma reesei* (see column 6, lines 40-42). Moreover, Fowler et al.

Art Unit: 1645

disclose that the expression vectors further comprise an inducible promoter and that said promoter can be *cbh1* (see column 5, lines 54-60 and column 13, lines 51-53). Additionally, Fowler et al. disclose that the expressed protein can either be either homologous or heterologous to the host cell (see column 14, lines 24-25). While Fowler et al. do not explicitly disclose that the promoters used are sophorose or gentiobiose inducible, the disclosed *cbh1* promoter possesses these characteristics. Consequently, Fowler et al. anticipate all the limitations of the instant invention. It should be noted that all the rejected claims are dependent on non-elected claim 1 which is drawn to a method of producing an inducing feed composition. However, since said claim does not recite the specific components of the “inducing feed composition” it is deemed, in absence of evidence to the contrary, that it is equivalent to the culture media disclosed in the cited reference.

Claims 15-18 and 23-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Lehmbeck (U.S. Patent 6,352,841).

The instant claims are drawn to methods of producing proteins (endogenous cellulase) utilizing a host cell wherein the said host cell can be a filamentous fungus (*Trichoderma reesei* or *Penicillium*) and said host cell contains a vector optionally comprising an inducible promoter.

Lehmbeck discloses methods of recombinantly producing cellulases utilizing fungal host cells. Lehmbeck further discloses that the fungal host cells can be *Trichoderma reesei* or a *Penicillium* species (see column 3, lines 23-32). Moreover, Lehmbeck discloses that the

Art Unit: 1645

expression vectors further comprise an inducible promoter and that the expressed protein can be heterologous to the host cell (see column 3, lines 13-14). Consequently, Lehmbeck anticipates all the limitations of the instant invention. It should be noted that all the rejected claims are dependent on non-elected claim 1 which is drawn to a method of producing an inducing feed composition. However, since said claim does not recite the specific components of the "inducing feed composition" it is deemed, in absence of evidence to the contrary, that it is equivalent to the culture media disclosed in the cited reference.

Claims 15-28 and 31-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Mitchinson et al. (U.S. Patent 6,268,328).

The instant claims are drawn to methods of producing proteins (endogenous cellulase) utilizing a host cell wherein the said host cell can be a bacteria (*Bacillus*, *Streptomyces*, *Thermomonospora* or *Cellulomonas*) or a filamentous fungus (*Trichoderma reesei*). Said host cell contains a vector wherein said vector can optionally comprise a sophorose or gentiobiose inducible promoter (*cbh 1*).

Mitchinson et al. disclose methods of recombinantly producing cellulases utilizing host cells comprising expression vectors wherein said host cells can be either bacterial, yeast or fungal. Mitchinson et al. further disclose that the bacterial host cells can be *Bacillus subtilis* and the fungal host cells can be *Trichoderma reesei* (see column 12, lines 14-15). Moreover, Mitchinson et al. disclose that the expression vectors further comprise an inducible promoter and that said promoter can be *cbh1* (see column 11, lines 38-39). Additionally, Mitchinson et al. disclose that the expressed protein can be heterologous to the host cell. While Mitchinson et al.

Art Unit: 1645

do not explicitly disclose that the promoters used are sophorose or gentiobiose inducible, the disclosed *cbh1* promoter possesses these characteristics. Consequently, Mitchinson et al. anticipate all the limitations of the instant invention. It should be noted that all the rejected claims are dependent on non-elected claim 1 which is drawn to a method of producing an inducing feed composition. However, since said claim does not recite the specific components of the "inducing feed composition" it is deemed, in absence of evidence to the contrary, that it is equivalent to the culture media disclosed in the cited reference.

Conclusion

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert A. Zeman whose telephone number is (571) 272-0866. The examiner can normally be reached on Monday- Thursday, 7am -5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynette Smith can be reached on (571) 272-0864. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1645

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Robert A. Zeman". The signature is fluid and cursive, with a long horizontal stroke at the end.

Robert A. Zeman

March 24, 2005